From: Dennis Davis <dennisdavis@cpheat.com>
Sent: Wednesday, October 12, 2022 3:20 PM

To: DES SBCC

**Subject:** Energy code written testimony

## External Email

From: Dennis Davis 3316 Peppers Bridge Rd., Walla Walla, WA Owner of College Place Heating and Air Conditioning, Inc.

My greatest concerns about the 2021 energy code (to go into effect 7/1/2023):

- 1. The energy credits, which are like mandates for all electric, increase the cost of housing. More significantly, it will increase the cost of electric utilities. As electricity becomes more and more the only energy source, there will be less incentive, (competition) to innovate for lower energy costs. Competition has proven over the decades and centuries to be the best motive for resourcefulness and efficiency at all levels of society.\* We need to decide if we want affordable housing or no family type housing, because the energy code squeezes us in that direction with the additional mandated expenses.
- 2. Discouraging natural gas into sub-divisions means relying on electricity and after-market wood stoves or after-market propane heaters, or worse yet kerosene heaters all of which are more problematic than natural gas. All electric is problematic because we do not have the infrastructure or even a reasonable plan for the infrastructure from generators to transmission lines which at this time will render 'all electric' a weak link for our state from many perspectives. Let us wait on these energy credits which are kind of like mandates until we have at least a plan for the generation and transmission that is sustainable.
- 3. Reaching HSPF 11 is weak at this time as an energy credit because of the lack of equipment availability. This has been temporarily remedied under current energy code. The proposed new energy code will be adopted when the existing HSPF will have been obsoleted by the federal government, 1/1/2022. The manufactures are not going to be in a good position for providing the new HSPF2 at 11 by July 2023. This will be especially and extremely problematic with the larger capacity heat pump 3.5 to 5 ton. The easiest way to get the HSPF2 to 11.0 is with ductless. Although ductless have a lot of positive aspects, a very negative aspect is that they will cost a lot more for maintenance. A 4 or 5 head ductless has 4 to 5 times more labor for maintenance, plus they do not have the effective filter options that ducted systems can employ for air quality. This is again going in the opposite direction of affordable and healthy family housing. Do we want affordable family housing or no new family housing?
- 4. The heat pump water heaters are a great and energy efficient idea. But again a relatively expensive idea. The savings that will accrue because of the greater efficiency, assuming current utility rates, will take 18 or more years to return the extra investment in the expensive, most efficient heat pump water heaters. I will predict that these expensive heat pump water heaters

will have a life expectancy of less than 10 years. This again goes against affordable family housing.\*\*

This energy code will, I believe, add to our State's housing problem for the reasons stated above. It needs to be rethought with the costs in mind both present cost and future cost for utilities and maintenance.

\*In our State, gas and electric have increased at a much lower rate than inflation over the last 50 years. Also our company has sold thousands of heat pump and gas furnace over the last 50 years. Most (probably 40 of those years) the highest efficiency heat pumps were 5% to 25% less expensive to operate than the highest efficiency gas furnaces. The remaining years a high efficiency natural gas furnace was 5% to 10% less expensive to operate than a high efficiency heat pump. The competitive market place between the two utilities has been like 'magic' for keeping prices low.

\*\* Our company sold heat pump water heaters in the 1980's. My prediction of life expectancy is based on that experience. The return on investment is based on pure math assuming a 'resistance electric element' water heater costs \$10 per month per person for utility expense and assuming a 4 person family, Also assuming the COP of the heat pump water heater is 3.0 which, I believe, is generous for our climate. It also assumes that the high efficiency heat pump water heater is \$6000 more than a standard tanked electric water heater.